**Install Jenkins on AWS EC2**

# How to Create Windows AWS EC2 Instance? | Create Windows AWS EC2 Instance | Live Demo in 5 Minutes

<https://www.youtube.com/watch?v=OwdIhnpl4BQ>

**How to Connect to Windows AWS EC2 Instance | Connect to Windows AWS EC2 Instance | Demo in 5 Minutes**

<https://www.youtube.com/watch?v=jnQoRZkPoWM>

**How to Install Jenkins in AWS EC2 Windows Instance || Configure || Demo**

<https://www.youtube.com/watch?v=8D_K7YIxLDc>

**Step 1**: Install Java JDK or JRE

<https://www.oracle.com/java/technologies/javase/jdk17-archive-downloads.html>

Windows x64 Installer (.exe) file

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Complete the process and finish

Step 2: Jenkins Installation

Refer Blog or JenkinsAWS\_Part1.pdf and JenkinsAWS\_Part2.pdf added in git:

<https://medium.com/@swetha.voora01>

**Step 3:**

1. **Email notification once build was triggered**

<https://wiki.jenkins.io/display/JENKINS/Building+a+software+project#Buildingasoftwareproject-belowJenkinsSetEnvironmentVariables>

Configure Email Notification In Jenkins | How To Send Email From Jenkins Job

[**https://youtu.be/MFgbp00hbVI?feature=shared**](https://youtu.be/MFgbp00hbVI?feature=shared)

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1. **Integrating slack with Jenkins**

How to send notifications from Jenkins to Slack | Jenkins Integrate with Slack | Slack Notify plugin

[**https://youtu.be/ICZvkR1oQQw?feature=shared**](https://youtu.be/ICZvkR1oQQw?feature=shared)

**Team Subdomain:** cs691-spring2024-yc

**Integration Token Credential ID:** Create a secret text credential using dOZLewLokoexwZo6AfhHDrkc as the value

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1. Modify SCM checkout retry count

Check the git code multiple times if the build fails to run the job successfully

How to Retry SCM Checkout Multiple times in Jenkins build

<https://youtu.be/2hL_peXBwXk?feature=shared>

I have set the scm retry count to 2 i.e 3times it will try to build job incase of any issue

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To test I entered a wrong branch name as “test” instead of “main”

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**CS691 – Jenkins Progress Report**

**Team: 4**

**Jenkins Admin: Surekha Maruti Salunkhe**

**Sprint 1: Planned and Completed Tasks**

|  |  |
| --- | --- |
| Planned Tasks | Completed Tasks |
| 1. Download & Install Java JDK and Jenkins 2. Jenkins Configuration:  * Install these plugins:   Pipeline Plugin  Git Plugin  AWS Steps Plugin  GitHub Integration plugin   * Create Admin User * Configure global security * Manage & Assign Roles  1. AWS Jenkins Setup  * Create EC2 Instance * Create Key-Pair * Launch Instance * Connect Instance  1. Jenkins Setup – Master-slave architecture 2. Integration with git, maven, java, tomcat and NodeJS 3. Creation of CI/CD pipelines for frontend, backend applications | * Download & Install Java JDK and Jenkins * Jenkins Configuration: * Install these plugins:   Pipeline Plugin  Git Plugin  AWS Steps Plugin  GitHub Integration plugin   * Create Admin User * Configure global security * Manage & Assign Roles  1. AWS Jenkins Setup  * Create EC2 Instance * Create Key-Pair * Launch Instance * Connect Instance  1. Jenkins Setup – Master-slave architecture 2. Integration with git, maven, java, tomcat and NodeJS 3. Creation of CD pipelines for frontend, backend applications |

**Sprint 2: Planned and Completed Tasks**

|  |  |
| --- | --- |
| Planned Tasks | Completed Tasks |
| 1. Enable tasks/pipeline automation 2. Automatically trigger deployment pipelines once code change has been done on git. 3. Integrated SSH plugin to execute shell script. 4. Initial challenges in automating deployments and sending Jenkins alerts. 5. Recognized the need for comprehensive monitoring and logging 6. Manage Jenkins plugins carefully and keep them up to date to benefit from new features and bug fixes  * Git Plugins * Git Integration Plugin  1. Regularly update Jenkins and its plugins to patch security vulnerabilities | 1. Enable tasks/pipeline automation 2. Automatically trigger deployment pipelines once code change has been done on git. 3. Integrated SSH plugin to execute shell script. 4. Faced initial challenges such as node modules update and creating slave node, fixed later 5. Recognized the need for comprehensive monitoring and logging 6. Continuous monitored git public token for expiry and Managed Jenkins plugins to keep them up to date to benefit from new features and bug fixes  * Git Plugins * Git Integration Plugin  1. Regularly update Jenkins and its plugins to patch security vulnerabilities |

**Sprint 3: Planned and Completed Tasks (TEAM 4)**

|  |  |
| --- | --- |
| Planned Tasks | Completed Tasks |
| 1. Email notification 2. Integrating slack With Jenkins 3. Modify SCM checkout retry count | 1. Email notification successfully built 2. Integrating slack With Jenkins : Build messages are sent to slack successfully 3. Modify SCM checkout retry count: Retry count successfully set for testing git job build |